

Amendments to the Claims

1. (currently amended) An apparatus for thermal testing of one or more samples, said apparatus comprising:

a single sample chamber;

a cooler and a heater to vary a temperature of a fluid;

an a single opening in said chamber for introduction of said fluid; and

a plurality of sample mounts for receiving the one or more samples circularly arranged around and equally distant from said opening;

wherein the heated or cooled fluid contacts and thereby varies a temperature of the one or more samples; and

wherein substantially no impediment to a flow of said fluid exists between any two adjacent samples.

2. (currently amended) The apparatus of claim 1 wherein the fluid temperature is lower than an ambient temperature.

3. (currently amended) The apparatus of claim 1 wherein the fluid temperature is higher than an ambient temperature.

4. (original) The apparatus of claim 1 wherein said fluid comprises air.

5. (original) The apparatus of claim 4 wherein said air is dried.

6. (original) The apparatus of claim 5 wherein said air is compressed.

7. (original) The apparatus of claim 1 wherein said fluid is cooled to a temperature lower than a desired low temperature.

8. (original) The apparatus of claim 7 wherein said cooled fluid is subsequently heated to the desired low temperature.

9. (original) The apparatus of claim 8 wherein said cooled fluid is subsequently heated to a desired high temperature.

10. (original) The apparatus of claim 1 wherein said sample mounts are evenly spaced.
11. (original) The apparatus of claim 1 wherein sufficient space exists between the one or more samples mounted in adjacent said sample mounts to permit uniform flow of said fluid.
12. (original) The apparatus of claim 1 wherein said sample mounts comprise slots to receive the one or more samples.
13. (original) The apparatus of claim 12 wherein said slots are oriented radially outward from said opening.
14. (original) The apparatus of claim 1 wherein said fluid flows radially outward from said opening.
15. (original) The apparatus of claim 1 wherein said sample mounts comprise electrical connectors.
16. (original) The apparatus of claim 15 wherein said electrical connectors comprise an electronic switching network.
17. (previously presented) The apparatus of claim 16 wherein said network comprises at least one ohmmeter.
18. (original) The apparatus of claim 17 wherein said network is in communication with a computer or processor.
19. (original) The apparatus of claim 18 wherein said computer or processor comprises a data acquisition system.
20. (original) The apparatus of claim 1 wherein the samples comprise test coupons.
21. (original) The apparatus of claim 20 wherein the test coupons comprise at least one net.

22. (original) The apparatus of claim 21 wherein the at least one net comprises a daisy-chain of vias.

23-36. (canceled)

37. (new) A method for thermally testing one or more samples, the method comprising the steps of:

circularly arranging one or more samples around and equally distant from a single opening in a single sample chamber;

varying a temperature of a fluid using a cooler or a heater;

introducing the fluid into the chamber via the single opening;

contacting the samples with the fluid; and

varying a temperature of the samples;

wherein substantially no impediment to a flow of the fluid exists between any two adjacent samples.

38. (new) The method of claim 37 wherein the fluid temperature is lower than an ambient temperature.

39. (new) The method of claim 37 wherein the fluid temperature is higher than an ambient temperature.

40. (new) The method of claim 37 wherein the fluid comprises air.

41. (new) The method of claim 40 further comprising the step of drying the air.

42. (new) The method of claim 40 further comprising the step of compressing the air.

43. (new) The method of claim 37 wherein the step of varying the fluid temperature comprises cooling the fluid to a temperature lower than a desired low temperature.

44. (new) The method of claim 43 further comprising the step of subsequently heating the cooled fluid to the desired low temperature.

45. (new) The method of claim 44 further comprising the step of subsequently heating the cooled fluid to a desired high temperature.

46. (new) The method of claim 37 wherein the sample mounts are evenly spaced.

47. (new) The method of claim 37 wherein sufficient space exists between the one or more samples mounted in adjacent said sample mounts to permit uniform flow of said fluid.

48. (new) The method of claim 37 wherein said sample mounts comprise slots to receive the one or more samples.

49. (new) The method of claim 37 wherein the slots are oriented radially outward from said opening.

50. (new) The method of claim 37 further comprising the step of radially flowing the fluid outward from the opening.